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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,166	09/19/2003		Andrew H. Segal	11111/20031	8303
29933	7590	06/15/2006		EXAMINER	
PALMER o	& DODGI	E, LLP	LE, EMILY M		
KATHLEEN	M. WILL	LIAMS			
111 HUNTI	NGTON A	VENUE	ART UNIT	PAPER NUMBER	
BOSTON, MA 02199				1648	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/667,166	SEGAL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Emily Le	1648				
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	:					
1) Responsive to communication(s) filed on 19 S	September 2003.					
	s action is non-final.					
3) Since this application is in condition for allowa	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-77</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-77</u> are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
The second desired and desired						
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Attachment(s)		(070.440)				
1)	4) Interview Summary Paper No(s)/Mail Da					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date		atent Application (PTO-152)				

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DETAILED ACTION

Status of the Claims

1. Claims 1-77 are pending.

Election/Restrictions

2. Claim 1 is generic to the following disclosed patentably distinct species:

Antigen bearing target: a tumor cell selected from the follow tumors: melanoma, squamous cell tumor, basal cell carcinoma, astrocytoma, glioma, glioblastoma multiforme, meningioma, ependymom, schwannoma, neuroblastoma, retinoblastoma, glomus tumor, sarcoma, osteosarcoma, Ewing's sarcoma, chondrosarcoma, myosarcoma, synovial cell sarcoma, fibrosarcoma, spindle cell tumor, angiosarcoma, primitive neuroectodermal cell tumor, Kaposi's sarcoma, lymphoma, acute leukemia, chronic leukemia, tumors of the head and neck, nasopharyngeal carcinoma, carcinoma of the pharynx, laryngeal carcinoma, carcinoma of the thyroid, carcinoma of the parathyroids, thymoma, esophageal carcinoma, gastric carcinoma, tumors of the small bowel, carcinoma of the colon or rectum, mesothelioma, lung carcinomas, pancreatic carcinoma, islet cell tumors, non-islet cell tumors, carcinoma of the breast, cardiac myxoma, pituitary tumors, carcinoid tumors, hepatoma, cholangiocarcinoma, hepatoblastoma, renal cell carcinoma, nephroblastoma, Wilms' tumor, adrenal carcinoma, pheochromocytoma, germ cell tumors, choriocarcinoma, ovarian carcinoma, testicular tumors, seminoma, endometrial tumors, carcinoma of the prostate, carcinoma of the seminal vesicles, vaginal tumors, carcinoma of the penis, hydatiform moles, carcinoma of the gall bladder, and carcinoma of the urinary bladder.

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First amino acid sequence: a carbohydrate binding domain of a collectin; a carbohydrate binding domain of a galectin; a carbohydrate binding domain of a C-type lectin; and an amino acid sequence which can bind to D-mannose, D-glucose, D-fucose, L-fucose, N-acetyl-beta-D-glucosamine, N-acetyl-beta-D-glucosamine, or a sialic acid.

Second amino acid: a ligand for a cytokine receptor, a ligand for CD40, a ligand for an adhesion molecule, a ligand for defensin receptor, a ligand for heat shock protein receptor, a ligand for a T cell costimulatory molecule; and a ligand for a counterreceptor for a T cell costimulatory molecule. If Applicant elects a ligand for a cytokine receptor, Applicant is further required to elect one species among the following: GM-CSF; IL-1 to IL-25; interferon alpha, beta and gamma; TNF-alpha; FTL-3; CXC-1, CXC-2, CXCR-3, CXCR-4, CCR-1, CCR-2, CCR-3, CCR-4, CCR-5, CCR-6, CCR-7, CCR-8, 9E3, AMCF, beta-thromboglobulin, ENA-78, eotaxin, eotaxin-2, IP-10, KC, LIX, mig, MGSA, mob-1, NAP-1, MAP-2, NAP-3, NAP-4, PBSF, MGSA, mouse KC, MIP-2, MIP-1 alpha, gcp-2, act-2, c10, Ccf18, DC-CK1, ELC, Exodus, FIC, GDCF, GDCF-2, HC-21, HCC-1, I-309, JE, LAG-1, MARC, MCAF, MCP-1, MCP-2, MCP-3, MCP-4, MRP-2, RANTES SDF, TARC, ATAC, Ltn, SCM-1, and neurotactin.

3. The species are independent or distinct for the following reason(s):

Broadly, unity of invention exists where compounds included within a Markush group (1) share a common utility, and (2) share a substantial structural feature essential to that utility. In re Harnisch, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and Ex parte Hozumi, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984).

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4. In the instant, each of the listed species is structurally very diverse from one another. The structural diversity noted also contributes to the diverse utilities that are noted for each of the listed species. For instance, the species a ligand that is a receptor for interleukin-1 is expected to have different structural characteristics as that of a ligand that is a receptor for a defensin receptor. Furthermore, the utility of a ligand that is receptor for interleukin-1 is to bind to or attract interleukin-1; whereas, the utility of a ligand that is receptor for a defensin receptor is to bind to or attract a defensin receptor. Thus, the claims fail to comply with the Harnisch test for unity of invention.

- 5. Additionally, because the claims fail to comply with the Harnisch test for unity of invention, Applicant is informed that MPEP 803.02 practice does not apply here.
- 6. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- 7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

 MPEP § 809.02(a).

8. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Le whose telephone number is (571) 272 0903. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce R. Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emily Le (Tox / 0) Patent Examiner Art Unit 1648 Page 6